ABSTRACT OF THE DISCLOSURE

A charge pump circuit circuit that supplies current to an offset current of an output signal for an oscillating circuit is disclosed. The charge pump circuit circuit includes a first switch and a second switch. The first switch is coupled to a gate of an output diode that provides a charge up current from the charge pump circuit circuit. A second switch is coupled to a source of the output diode and supplies the charge up current to the output diode. The first switch comprises a first state and the second switch comprises a second state that is opposite the first state. Thus, when the second switch is on, the first switch is off. The charge pump circuit circuit also includes a capacitance to hold a bias voltage when the first switch is off.